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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,304	12/31/2003	Kazuhiko Taira	247190US2SX	8437
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER HASAN, SYED Y	
			ART UNIT 2621	PAPER NUMBER
			NOTIFICATION DATE 11/20/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/748,304	Applicant(s) TAIRA ET AL.	
	Examiner Syed Y. Hasan	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 -12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 -12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :03/30/2004, 04/12/2005 and 08/12/2005.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent thereof, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility " (Official Gazette notice of 22 November 2005), Annex IV reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 1 - 4 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows.

Claims 1 - 4 define "recording medium" with descriptive material. While "functional descriptive material" may be claimed as a statutory product (i.e., a "manufacture") while embodied on a tangible computer readable medium, recording medium embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four

statutory class of §101. Rather, "medium" is a form of energy, in the absence of any physical structure or tangible material. Examiner recommends changing "An information recording medium recording highlight information " to "A computer readable information recording medium recording highlight information"

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (JP, 11-215471,A) in view of Nagasawa et al (JP,08-191423,A)

Regarding **claim 1**, Maruyama et al discloses an information recording medium (para 0001) recording a video manager (para 0077) and a plurality of video title sets (para 0080), wherein each of the video title sets describes video title set information (para 0182) the video title set information describes a video title set information management table (para 0183) the video title set information management table describes an attribute of a sub-picture stream about a video title set menu (para 0234, sub-video) and the attribute of the sub-picture stream describes a flag (para 0115) indicating a method for storing pixel data (para 0078)

However Maruyama et al does not disclose a flag indicating a run length compression/non-compression of the pixel data.

On the other hand Nagasawa et al teaches a flag indicating a run length compression/non-compression of the pixel data (para 0061)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a flag indicating a run length compression/non-compression of the pixel data as taught by Nagasawa et al in the system of Maruyama et al in order to raise the capacity utilization of the medium.

4. Claims 2 - 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama et al (JP,11-215471,A) in view of Nagasawa et al (JP,08-191423,A) and further in view of Kikuchi et al (JP,10-098721,A)

Regarding **claim 2**, Maruyama et al discloses an information recording medium, wherein the flag (para 0115) indicating the method for storing pixel data indicates one of a storage method (para 0078)

However Maruyama et al and Nagasawa et al do not disclose an interlace display and a non-interlace display.

On the other hand Kikuchi et al teaches an interlace display and a non-interlace display (para 0179)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate an interlace display and a non-interlace display as taught by Kikuchi et al in the system of Maruyama et al and Nagasawa et al in order to improve the encoding and decoding of the system for image formation.

Regarding **claim 3**, Maruyama et al discloses an information recording medium recording a video object set (para 0077) comprising a plurality of video objects, (para 0082) each of the video objects comprising a plurality of cells, each of the cells (para 0183) comprising a plurality of video object units (para 0183) including a video pack (para 0148) and a sub-picture pack (para 0234 sub-video) and the sub-picture category describes a flag (para 0115) indicating a method for storing pixel data (para 0078)

However Maruyama et al does not disclose a flag indicating a run length compression/non-compression of the pixel data.

On the other hand Nagasawa et al teaches a flag indicating a run length compression/non-compression of the pixel data (para 0061)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a flag indicating a run length compression/non-compression of the pixel data as taught by Nagasawa et al in the system of Maruyama et al in order to raise the capacity utilization of the medium.

The combination of Maruyama et al and Nagasawa et al does not disclose wherein a sub-picture unit formed of a plurality of sub-picture data included in the sub-picture pack comprises a sub-picture unit header pixel data and a display control sequence table; the sub-picture unit header describes a sub-picture category

On the other hand Kikuchi et al teaches wherein a sub-picture unit formed of a plurality of sub-picture data included in the sub-picture pack (para 0069, subimage packets) comprises a sub-picture unit header (para 0069), pixel data (para 0069) and a display control sequence table (para 0072) the sub-picture unit header describes a

sub-picture category (para 0069)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate wherein a sub-picture unit formed of a plurality of sub-picture data included in the sub-picture pack comprises a sub-picture unit header, pixel data, and a display control sequence table; the sub-picture unit header describes a sub-picture category as taught by Kikuchi et al in the combined system of Maruyama et al and Nagasawa et al in order to improve the encoding and decoding of the system for image formation.

Regarding **claim 5**, Maruyama et al discloses an information playback apparatus (para 0001) used for an information recording medium recording a video manager and a plurality of video title sets, wherein each of the video title sets describes video title set information; the video title set information describes a video title set information management table; the video title set information management table describes an attribute of a sub-picture stream about a video title set menu; and the attribute of the sub-picture stream describes a flag indicating a method for storing pixel data and a flag indicating a run length compression of the pixel data (see claim 1 above)

the information playback apparatus comprising: means for reading the flag (para 0115) indicating the method for storing pixel data (para 0078) and the flag indicating the run length compression/non-compression from the information recording medium; (para 0078) means for discriminating whether or not the pixel data is in a high definition scheme (para 0007) or in a standard definition scheme based on the flags read by the reading means (para 0115) and means for making a decoder (para 0226) required for

playback standby (para 0434) according to a data scheme discriminated by the discriminating means (para 0007)

However Maruyama et al does not disclose a flag indicating a run length compression/non-compression of the pixel data.

On the other hand Nagasawa et al teaches a flag indicating a run length compression/non-compression of the pixel data (para 0061)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a flag indicating a run length compression/non-compression of the pixel data as taught by Nagasawa et al in the system of Maruyama et al in order to raise the capacity utilization of the medium.

Claims 4, 6, 8 10 and 12 are rejected based on claim 2 above.

Claims 7 and 11 are rejected based on claims 3 and 5 above.

Claim 9 is rejected based on claims 1 and 5 above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Hasebe et al (US 6483875) discloses a picture signal processing apparatus.

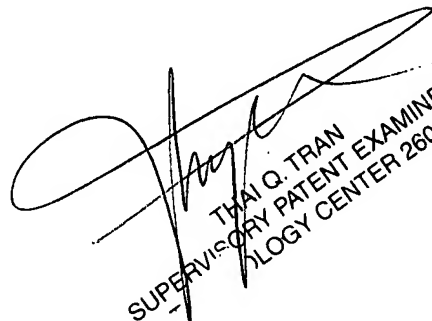
Isozaki et al (US 6470142) discloses a data recording and reproducing apparatus and method and synchronization detecting apparatus and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Y. Hasan whose telephone number is 571-270-1082. The examiner can normally be reached on 9/8/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.Y.H.
11/09/2007



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